



6712-01

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 87 and 90

[WT Docket No. 11-202; FCC 13-95]

Radiolocation Operations in the 78-81 GHz Bands; Request by the Trex Enterprises Corporation for Waiver

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: In this document, the Federal Communications Commission (Commission) amends its rules to permit the certification, licensing, and use of foreign object debris (FOD) detection radar equipment in the 78-81 GHz band. The presence of FOD on airport runways, taxiways, aprons, and ramps poses a significant threat to the safety of air travel. FOD detection radar equipment will be authorized on a licensed basis.

DATES: Effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

FOR FURTHER INFORMATION CONTACT: Tim Maguire, Mobility Division, Wireless Telecommunications Bureau, (202) 418-2155.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Report and Order (R&O), in WT Docket No. 11-202; FCC 13-95, adopted July 10, 2013, and released July 11, 2013. The full text of this document is available for inspection and copying during normal business hours in the FCC Reference Center, 445 12th Street SW, Room CY-A257, Washington, DC 20554, or by downloading the text from the Commission's website at

http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0301/FCC-13-30A1.pdf. The complete text also may be purchased from the Commission's duplicating contractor, Best Copy and Printing, Inc., Portals II, 445 12th Street, SW, Suite CY-B402, Washington, DC 20554.

Alternative formats are available for people with disabilities (Braille, large print, electronic files,

audio format), by sending an e-mail to FCC504@fcc.gov or calling the Consumer and Government Affairs Bureau at (202) 418-0530 (voice), (202) 418-0432 (TTY).

I. BACKGROUND

1. Foreign object debris (FOD) at airports, including any substance, debris, or object in a location that can damage aircraft or equipment, can seriously threaten the safety of airport personnel and airline passengers, and can have a negative impact on airport logistics and operations. Trex Enterprises Corporation (Trex) has developed radar technology that meets the Federal Aviation Administration's (FAA) guidance and performance specifications for FOD detection equipment and can reduce this risk to personal safety and property by detecting the presence of FOD on airport runways. The 78-81 GHz band in which Trex's equipment operates is allocated on a primary basis for Federal and non-Federal radio astronomy and radiolocation systems, but is not listed in the table of frequencies available under part 90, which authorizes non-Federal radiolocation operations such as Trex's FOD detection equipment.

2. In the Notice of Proposed Rule Making and Order in this proceeding, the Commission proposed to amend part 90 to permit non-Federal radiolocation operations, including FOD radar detection technology, in the 78-81 GHz band, and granted Trex a waiver of part 90 to permit certification, manufacture, and licensing of its FOD detection radar equipment pending the resolution of its petition for rulemaking.

II. DISCUSSION

3. No commenter supports part 90 licensing of any 78-81 GHz band non-Federal radiolocation other than FOD detection. We therefore amend part 90 to authorize only FOD detection radar on a licensed basis.

4. We do not adopt technical specification for FOD detection radar in the 78-81 GHz band. Applications will be considered and authorized on a case-by-case basis. FOD detection radar will

be licensed on the condition that the main beamwidth of the antenna (azimuth or elevation) does not illuminate a public roadway near the airport.

5. Authorization of other potential uses of the 78-81 GHz band will be considered in other proceedings. The Commission may at that time consider whether to adopt additional rules governing FOD detection radar in the band (such as the adoption of technical specifications) in order to ensure compatibility between FOD detection radar and other uses, including those that may operate on an unlicensed basis under part 15 of the Commission's rules. Until such technical specifications or other rules are adopted, we will consider the technical parameters required under the waiver when authorizing FOD equipment. During this period we will also accept applications for equipment authorization for devices using similar or more conservative parameters than those specified in the waiver. Any request for equipment authorization of devices with parameters that, in our evaluation, may be considered to cause more interference as compared with the technical parameters in the waiver will be reviewed on a case-by-case basis.

III. PROCEDURAL MATTERS

A. Paperwork Reduction Act Analysis

6. This document does not contain new or modified information collection requirements.

B. Report to Congress

7. The Commission will send a copy of the R&O to Congress and the Government Accountability Office pursuant to the Congressional Review Act, see 5 U.S.C. 801(a)(1)(A).

C. Final Regulatory Flexibility Analysis

8. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the NPRM in WT Docket No. 11-202, 77 FR 1661, January 11, 2012. The Commission sought written public comment on the proposals in the NPRM, including comment on the IRFA. This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.

Need for, and Objectives of, the Report and Order

9. The rules adopted in the Report and Order are intended to amend the Part 90 rules to permit foreign object debris (FOD) detection equipment to be certified and licensed. We believe the use of FOD technology will be a critical tool in the detection of FOD at airports. FOD includes any substance, debris, or object in a location that can damage aircraft or equipment, can seriously threaten the safety of airport personnel and airline passengers and have a negative impact on airport logistics and operations.

Summary of Significant Issues Raised by Public Comments in Response to the IRFA

10. No comments were submitted specifically in response to the IRFAs. Nonetheless, we have considered the potential economic impact on small entities of the rules discussed in the IRFAs, and we have considered alternatives that would reduce the potential economic impact on small entities of the rules enacted herein.

Description and Estimate of the Number of Small Entities to Which Rules Will Apply

11. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the rules adopted. The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.” In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act. A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA). A small organization is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.” Below, we further describe and estimate the number of small entity licensees and regulatees that may be affected by the rules changes adopted in this Report and Order.

12. The SBA has developed a small business size standard for airport operations within the two broad economic census categories of “Air Traffic Control” and “Other Airport

Operations.” Under both categories, the SBA deems a business to be small if it has average annual receipts of seven million dollars or less. For the census category of Airport Operations, Census Bureau data for 2007 show that there were 1,895 firms in this category that operated for the entire year. Of this total, 1,567 had annual revenue of less than five million dollars, and 167 had annual revenue between five and ten million dollars. Thus, under this category and associated small business size standard, the majority of firms can be considered small.

13. The Census Bureau defines the category of “RF Equipment Manufacturers” as follows: “This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.” The SBA has developed a small business size standard for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing, which is: all such firms having 750 or fewer employees. According to Census bureau data for 2007, there were a total of 939 firms in this category that operated that year. Of this total, 912 had fewer than 500 employees and 27 had 500 or more employees. Thus, under this size standard, the majority of firms can be considered small.

Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

14. There are no projected reporting, recordkeeping or other compliance requirements.

Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

15. The RFA requires an agency to describe the steps it has taken to minimize the significant economic impact on small entities consistent with the stated objectives of applicable

statutes, including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected.

16. We believe the changes adopted in the R&O will promote flexibility and more efficient use of the spectrum, and allow licensees to better meet their communication needs. In this R&O, we will allow the certification, licensing, and use of foreign object debris detection radar in the 78-81 GHz band.

17. The Commission will send a copy of the R&O in WT Docket No. 11-202 including the Final Regulatory Flexibility Analysis, in a report to be sent to Congress pursuant to the Congressional Review Act. In addition, the Commission will send a copy of the R&O, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the SBA. A copy of the R&O and the Final Regulatory Flexibility Analysis (or summaries thereof) will also be published in the Federal Register.

List of Subjects in 47 CFR parts 87 and 90

Communications equipment; Radio.

FEDERAL COMMUNICATIONS COMMISSION

Sheryl D. Todd,
Deputy Secretary.

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR parts 87 and 90 as follows:

PART 87— AVIATION SERVICES

1. The authority citation for part 87 continues to read as follows:

Authority: 47 U.S.C. 154, 303 and 307(e), unless otherwise noted.

2. Section 87.5 is amended by adding a definition “Air operations area” in alphabetical order to read as follows:

§ 87.5 Definitions.

* * * * *

Air operations area. All airport areas where aircraft can operate, either under their own power or while in tow. The airport operations area includes runways, taxiways, apron areas, and all unpaved surfaces within the airport’s perimeter fence. An apron area is a surface in the air operations area where aircraft park and are serviced (refueled, loaded with cargo, and/or boarded by passengers).

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PART 90— PRIVATE LAND MOBILE RADIO SERVICES

3. The authority citation for part 90 continues to read as follows:

Authority: Sections 4(i), 11, 303(g), 303(r), and 332(c)(7) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 161, 303(g), 303(r), 332(c)(7), and Title VI of the Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. 112-96, 126 Stat. 156.

4. Section 90.103(b) is amended by adding a new entry at the end of the table in paragraph (b), and by adding paragraph (c)(30) to read as follows:

§ 90.103 Radiolocation Service.

* * * * *

(b) * * *

RADIOLOCATION SERVICE FREQUENCY TABLE

Frequency or band	Class of stations	Limitations
* * *	* *	* *
78,000-81,000do	30

(c) * * *

(30) Use is limited to foreign object debris detection in airport air operations areas (see section 87.5 of this chapter). The radar must be mounted and utilized so when in use it does not, within the main beamwidth of the antenna (azimuth or elevation), illuminate a public roadway near the airport.

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[FR Doc. 2013-18013 Filed 07/25/2013 at 8:45 am; Publication Date: 07/26/2013]